



# Antioxidants

## Nature's Protection From Inflammation, Aging and Degenerative Disease

In the 1940's, Dr. Denham Harmon started working with free radical chemistry and went on to develop the Free-Radical Theory of Aging during 40 years of research. Although much of his work was ahead of its time, he is now respected and honored by scientists specializing in the causes and treatments of aging. Dr. Harmon's idea is that free radicals seriously and continuously harm the body – causing most of the debilitating diseases usually associated with aging. These degenerative conditions include arthritis, heart disease and cancer. In fact, upwards of 50-80 diseases have been associated with free radicals.

Free radicals are primarily oxygen radicals that can be thought of as tiny " arsonists " waiting to start inflammatory " fires " in the body. When you see iron rusting, copper developing a green patina, or oils going rancid, then you are seeing oxidation at work. These same oxidative processes can do damage to the body's tissues, which are much more delicate than metal or processed oils.

The problem is that almost everything we do and everything that happens to us produces chemical damage to our body. Our own life processes produce free radicals. These are a normal part of energy production and use within every cell. The liver and the immune system have special cells (Kupfer's cells and macrophages), which dismantle incompletely digested food and foreign material such as bacteria by producing free radicals. If these reactive chemicals are not promptly neutralized, they will also damage nearby tissue. These are only two of many possible examples.

We are also assaulted by outside sources of free radicals. Radiation does much of its damage by creating free radicals. Smoking, pesticides, insecticides, preservatives, artificial colors and flavors, cleaning chemicals and even personal hygiene products do the same.

Happily, we are also surrounded by abundant sources of antioxidant nutrients, which can quench the chain-reactions of damage that can be caused by free radicals. Our best defense is to assure that our tissues are abundantly supplied with a wide range of these protectors.

Fruits and vegetables are loaded with antioxidant nutrients, which is part of the reason why everyone should be consuming 5-7 generous servings of fruits and vegetables every day. Unfortunately, few Americans actually do this. So, supplementing antioxidants may be helpful.

The best antioxidant supplements are those derived primarily from whole foods and herbs. For instance, herbs like rose-

mary, turmeric, bilberry, milk thistle, ginkgo, ginseng, ginger and green tea all contain powerful antioxidants.

Thai-Go is a powerful antioxidant made from various fruits and antioxidant herbs. This liquid antioxidant drink contains mangosteen, a tropical fruit found to contain very potent antioxidants that can block allergic reactions and protect blood vessels from damage. It also contains wolfberry or lycium, an herb with a long history of use in Chinese medicine for protecting the liver from toxins. Other antioxidants in Thai-Go include green tea, sea buckthorn, grape extracts and blueberry.

Another useful antioxidant supplement is Grapine. Grapine contains proanthocyanidins derived from grape seeds and maritime pine bark. Proanthocyanidins have been shown to have a protective effect on the cardiovascular tissues, improving circulation, improving capillary permeability and decreasing capillary fragility. These compounds also reduce inflammation, protect connective tissue (collagen) from degradation, and protect the liver. Proanthocyanidins are available in High Potency Grapine, Grapine with Protectors, and Chewable Antioxidants with Grapine. The chewable tablets are a good way to get antioxidant nutrients into children.

One of the most damaging of the free radicals is the superoxide radical, which is neutralized by an enzyme called superoxide dismutase. It is available in supplement form in S-O-D with Gliadin.

The cells of the body contain a powerful antioxidant called glutathione, which actually helps recycle other antioxidants. N-acetyl-Cysteine is a precursor to glutathione and is a powerful antioxidant for protecting the liver, skin, eyes, and circulation. It is also available in supplement form.

Another antioxidant supplement to consider is Super Antioxidant, which contains tocotrienols, lycopene, alpha lipoic acid, rose hips, milk thistle and turmeric. This formula has broad-acting antioxidants to protect a variety of tissues against free radical damage and environmental toxins.

These are not the only antioxidant choices available, but represent a few of the best choices. For assistance in determining which supplements are right for you, talk to an herb specialist. You can also consult some of the references below for more information.

### Selected References

*Herbal Therapy and Supplements* by Merrily A. Kuhn and David Winston  
*The One Spirit Encyclopedia of Complementary Health*, Nikki Bradford, Editor  
*Professional Guide to Conditions, Herbs and Supplements* by IntegrativMedicine

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